

Application No. 10/772,070
After Final Office Action of July 1, 2008

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REMARKS

In the Office Action dated July 1, 2008, claims 1-10 are pending, claims 1 and 8 are withdrawn, and claims 2-7 9 and 10 are rejected. The rejection is made final. Reconsideration is requested, at least for the reasons discussed herein.

As set forth in current claim 2, Applicants invention is directed to

a developer manufacturing apparatus comprising at least a **reactor**, a **jet mechanism** and a mechanism connecting therebetween, wherein

the **reactor** comprises an inlet for passage of supercritical or subcritical fluid into the reactor, a **developer material carrier** comprising a mesh that prevents the passage of treated developer materials and allows the passage of the supercritical or subcritical fluid having dissolved developer components and dispersed coloring agent, a stirring mechanism and an outlet for the dissolved developer components and dispersed coloring agent carried by the supercritical or subcritical fluid;

the **developer material carrier** containing developer material comprising a resin and a pigment;

the **jet mechanism** ejecting the dissolved developer components and dispersed coloring agent carried by the supercritical or subcritical fluid into an open region of an open chamber, thereby forming particles of developer having dispersed coloring agent, the particles having a generally spherical shape.

Claims 2-5, 7, 9 and 10 are rejected under 35 U.S.C. §103(a) over Bausche et al. (US 6,299,906; "Bausche") in view of Kaga (JP 61-293536). Bausche does not describe the preparation of a developer comprising a resin having coloring pigments dispersed therein, which is a feature of the present invention. Bausche describe a process for making submicron particles of a biologically active compound or pharmaceutical, optionally having a surface modifier. As illustrated in FIG. 2, the average particle size is about 300 nm. Bausche has no suggestion for making developers which comprise a resin with dispersed coloring pigments, as described and claimed herein. There is no suggestion in Bausche, e.g., that the apparatus described therein could be modified and operated to

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make developers comprising a resin with dispersed coloring pigments. Manifestly, Bausche *fails* to teach or suggest, e.g., that the apparatus comprises a "developer material carrier containing developer material comprising a resin and a pigment," as claimed herein.

Kaga does not make up for the deficiencies of Bausche. As described in the English Abstract, Kaga also *fails* to teach or suggest, e.g., that the apparatus comprises a "developer material carrier containing developer material comprising a resin and a pigment," as claimed herein.

The Examiner states that she disagrees with Applicants argument that "[t]here is no suggestion in Bausche that the apparatus described therein could be modified and operated to make developers comprising a resin with dispersed coloring pigments." The Examiner further states that:

Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. Furthermore, the inclusion of a material or article worked upon by a structure being claimed does not impart patentability to the claims. See MPEP 2115.

It is respectfully submitted that the Examiner has misunderstood Applicants' arguments. Applicants respectfully submit that, in view of any combination of Bausche and Kaga, it would not have been obvious to one of ordinary skill in the art to practice Applicants invention to provide a developer manufacturing apparatus having a developer material carrier and a jet mechanism wherein the developer material carrier **contains *developer material*** comprising a resin and a pigment **and** the jet mechanism ejecting the *dissolved developer components* and dispersed coloring agent carried by the supercritical or subcritical fluid into an open region of an open chamber, **thereby forming particles of developer** having dispersed coloring agent, the particles having a generally spherical shape. As discussed above, Bausche describes only a process for making submicron particles of a biologically active compound or pharmaceutical, optionally having a surface modifier. Bausche has no suggestion for making develops which comprise a resin with dispersed coloring pigments, as described and claimed herein. Kaga also *fails* to teach or suggest that the apparatus comprises a "developer material carrier containing developer material comprising

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a resin and a pigment." Thus, there is no suggestion in Bausche, Kaga or their combination for the presently claimed developer manufacturing apparatus.

The Examiner contends it would have been obvious to substitute the material carrier/stirring mechanism of Kaga into the apparatus of Bausche because it would help shorten required dissolving time. Applicants respectfully disagree.

Bausche describes and claims the use of dimethyl ether to overcome the problems of poor solubility of pharmaceutical compounds in CO₂. The dissolving apparatus of Kaga published in 1986, well prior to the European priority filing date of Bausche in April 1998. If it were obvious to modify the apparatus of Bausche to shorten dissolving time, such solution certainly was not obvious to Bausche. Why would a person of ordinary skill in the art find it obvious to modify the Bausche apparatus?

Applicants respectfully submit that it is mere speculation to conclude that modification of the Bausche apparatus would have been obvious to one of ordinary skill in the art to provide a developer manufacturing apparatus, as claimed herein.

Thus, it is not seen how the present invention would have been obvious in view of any combination of Bausche and Kaga.

Claim 6 is rejected under 35 U.S.C. §103(a) over Bausche in view of Kaga, and further in view of Inoue (EP 526 699). Bausche and Kaga are discussed above. Inoue fails to make up for the deficiencies of Bausche and Kaga. Inoue also *fails* to teach or suggest, e.g., that the apparatus comprises a "developer material carrier containing developer material comprising a resin and a pigment," as claimed herein.

Inoue discloses a dispersing and grinding apparatus. The Inoue relates to apparatus that uses dispersing, grinding media such as balls, beads, etc. [col. 1, lines 5-10]. It is well known to use such

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dispersing grinding media to finely disperse particles in a fluid. In Inoue, the dispersing media does not flow out of the basket into the tank [col. 2, lines 20-25].

However, the apparatus in accord with the present invention dissolves a resin in a subcritical or supercritical fluid to provide particles of resin containing dispersed pigments; no grinding media is utilized.

It is not seen how the disclosure of Inoue is relevant to the present invention. It is respectfully submitted that one of ordinary skill in the art would not look to Inoue for developing an apparatus or method for dissolving a resin in a subcritical or supercritical fluid. It is not seen how one of ordinary skill in the art would combine the teachings of Bausche and Kaga with Inoue. Further, even if one of ordinary skill in the art were to combine the teachings, it is not seen what combination would result or how the presently claimed invention would result.

The Examiner acknowledges that Inoue is cited merely as showing that it is capable of being rotated in reverse direction relative to the direction of rotation of a stirring mechanism.

Inoue is totally silent on use of subcritical or supercritical fluid. Inoue fails to teach or suggest dissolving developer components in a subcritical or supercritical fluid and, then, ejecting the fluid with dissolved components under pressure into an open chamber to form particles.

Thus, it is not seen how the present invention would have been obvious in view of any combination of Bausche, Kaga and Inoue.

In view of the above discussion above, applicant believes the pending application is in condition for allowance. an early reconsideration and notice of allowance are earnestly solicited.

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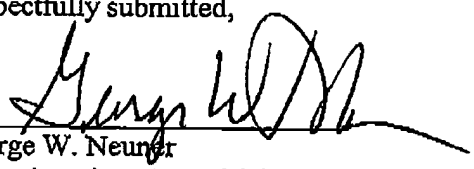
If for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, the Commissioner is hereby authorized and requested to charge Deposit Account No. 04-1105.

Dated:

1 Oct '08

Respectfully submitted,

By


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